

RARE AND ENDANGERED VASCULAR PLANT SPECIES IN NEW ENGLAND¹

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This regional list represents an outgrowth of a project of the New England Botanical Club's Endangered Species Committee, chaired by William D. Countryman and Garrett E. Crow (vice-chairman). In the fall of 1978 the committee members published individual state reports of rare and endangered vascular plants: Maine (Eastman, 1978), New Hampshire (Storks & Crow, 1978), Vermont (Countryman, 1978), Massachusetts (Coddington & Field, 1978), Rhode Island (Church & Champlin, 1978), and Connecticut (Mehrhoff, 1978). It was then the desire of the committee to consolidate this information in an effort to produce a listing pertaining to the entire New England region, including only taxa significant to all of New England.

An interest in documenting the rare elements of New England's flora has existed for some time. In 1971 the Natural Areas Criteria Committee of the New England Botanical Club was formed to prepare a set of criteria for the identification and evaluation of natural areas (Countryman, 1972). The Endangered Species Committee has applied these criteria in the development of this regional list, as well as individual state lists. Additionally, for the regional list, a basic "rule of thumb" for listing taxa as E/T ("endangered"/"threatened") was documentation of each taxon by fewer than 10 towns and R ("rare") status was assigned to taxa represented by populations in 10-20 towns within New England. Special consideration was given to plants whose present known populations appear to be on the decline with respect to the number of documented localities, to disjuncts, and to plants of specialized or vulnerable habitats. Further attention was given to plants which are likely to be exploited because of particularly appealing features, such as the orchids and ferns. Certain plants which are less conspicuous, such as some grasses and sedges, may not have been included in the list even though documented records may have been few.

¹Scientific contribution 1074 from the New Hampshire Agricultural Experiment Station.

The New England regional list contains 479 taxa. Two New England taxa (*Pedicularis furbishiae* and *Potentilla robbinsiana*) have been listed by the Office of Endangered Species, U. S. Fish and Wildlife Service, as "endangered." Two additional taxa have been formally proposed (*Isotria medeoloides*, as "endangered," and *Paronychia argyrocoma* var. *albimontana*, as "threatened"). The federal status assigned each of these taxa is so adopted here in the regional list. However, the committee felt it desirable, at present, to use the compound status E/T rather than attempt to distinguish between those which might be "endangered" or might be "threatened" with extinction. The list is based, in large part, on historical records documented by specimens in herbaria. Although a great deal of field work has been conducted in conjunction with this project, information regarding the present-day status of populations of a large number of taxa on the list remains incomplete. 337 taxa are listed as E/T. Those taxa which are designated R, 133 taxa, merit watching in the future, but presently do not appear to be endangered or threatened in the New England region.

The committee has recognized 95 taxa as being of national significance (designated by an asterisk). This group includes numerous species whose occurrence within the United States is extremely limited, but which may, for instance, be more frequent in arctic regions of North America, and thus may not be eligible for consideration under the Endangered Species Act of 1973.

A total of 23 taxa which occur in New England are under review by the Office of Endangered Species for possible listing under the Endangered Species Act of 1973, and 16 taxa previously under review have been dropped from consideration, as presented in Table 1. In 1975 the Office of Endangered Species published in the Federal Register (FR, 1 July 1975, Vol. 40, no. 127) a list of taxa under review for federal listing. This list was followed by a formal proposal of endangered taxa (FR, 16 June 1976, Vol. 41, no. 117). In 1978 the Smithsonian Institution (Ayensu & DeFilipps, 1978) published a revision of their 1975 report to Congress (which served as the basis of the 1975 notice of review). Subsequent to the Endangered Species Act Amendments of 1978, which placed a 2-year limit for proposed rulemaking, all proposed plant species were mandatorily withdrawn in November 1979. In an effort to bring the past notice of review, proposal, and Smithsonian reports up-to-date, the Office of Endangered Species has published a revised notice of review (FR, 15 December 1980, Vol. 45, no. 242).

Table 1. Threatened and Endangered Plant Species Considered for Federal Listing which occur in New England.

Taxon	States	Notice of Review FR 1975	Proposed taxa FR 1976	Smithsonian Report— 1978	Notice of Review FR 1980
<i>Pedicularis furbishiae</i>	ME	PrEx	E	E	E*
<i>Potentilla robbinsiana</i>	NH	E	E	E	E*
<i>Isotria medeoloides</i>	ME, NH, VT MA, RI, CT	E	E	E	E*
<i>Paronychia argyrocoma</i> var. <i>albimontana</i>	ME, NH, MA	T		T	T*
<i>Eupatorium leucolepis</i> var. <i>novae-angliae</i>	MA, RI	T		T	1
<i>Platanthera leucophaea</i> (= <i>Habenaria leucophaea</i>)	ME	T		T	1
<i>Prunus maritima</i> var. <i>gravesii</i> (= <i>P. gravesii</i>)	CT	E	E	E	1
<i>Trollius laxus</i> ssp. <i>laxus</i>	CT	E	E	E	1

Table 1. Threatened and Endangered Plant Species Considered for Federal Listing which occur in New England.

Taxon	States	Notice of Review FR 1975	Proposed taxa FR 1976	Smithsonian Report— 1978	Notice of Review FR 1980
<i>Agalinus acuta</i>	MA, RI, CT	T		T	2
<i>Minuartia marcescens</i> (= <i>Arenaria marcescens</i>)	VT				2
<i>Astragalus robbinsii</i> var. <i>jesupi</i>	NH, VT	E	E	E	2
<i>Braya humilis</i> var. <i>leiocarpa</i>	VT				2
<i>Cardamine longii</i>	ME	T		T	2
<i>Carex oronensis</i>	ME	T		T	2
<i>Helianthemum dumosum</i>	MA, RI, CT	T			2
<i>Isoetes eatonii</i>	NH, MA, CT	T			2
<i>Listera auriculata</i>	ME, NH, VT	T		T	2
<i>Mimulus ringens</i> var. <i>colpophilus</i>	ME	E	E	E	2

<i>Oxytropis campestris</i> var. <i>johannensis</i>	ME					2
<i>Potamogeton hillii</i>	VT, MA, CT	T			T	2
<i>Potamogeton lateralis</i>	NH, VT, MA, CT					2
<i>Prenanthes boottii</i>	ME, NH, VT	T			T	2
<i>Schwalbea americana</i>	MA, CT				T	2
<i>Scirpus ancistrochaetus</i>	VT, MA	E	E		E	2
<i>Scirpus longii</i>	ME, MA, CT	T				2
<i>Valeriana uliginosa</i>	ME, VT					2
<i>Viola novae-angliae</i>	ME					2
<i>Asplenium ebenoides</i>	MA, CT	T				3B
<i>Astragalus robbinsii</i> var. <i>robbinsii</i>	VT	Ex	E		E	3A
<i>Calamagrostis inexpansa</i> var. <i>novae-angliae</i>	ME, NH, VT	E	E		E	3B
<i>Calamagrostis nubila</i>	NH	Ex, Tax?				3B

Table 1. Threatened and Endangered Plant Species Considered for Federal Listing which occur in New England.

Taxon	States	Notice of Review FR 1975	Proposed taxa FR 1976	Smithsonian Report— 1978	Notice of Review FR 1980
<i>Carex elachycarpa</i>	ME	E	E	E	3B
<i>Carex josselynii</i>	ME			T	3B
<i>Cypripedium arietinum</i>	ME, NH, VT MA, CT	T		T	3C
<i>Geum peckii</i>	NH	E	E	E	3C
<i>Hydrastis canadensis</i>	VT, MA, CT			T	3C
<i>Isoetes foveolata</i>	NH, MA, CT	T		T	3B
<i>Juncus pervetuus</i>	MA	Ex,Cult	E	Ex	3A
<i>Panax quinquefolius</i>	ME, NH, VT, MA, RI, CT	E/T ¹		T	3C*
<i>Platanthera flava</i> (= <i>Habenaria flava</i>)	ME, NH, VT, MA, RI			T	3C
<i>Primula mistassinica</i>	ME, VT	E/T ²			3C

<i>Prunus alleghaniensis</i>	CT	T	T	3C
<i>Steironema laevigatum</i> (= <i>Lysimachia hybrida</i>)	ME, NH, VT MA, RI, CT			3C

¹ *Panax quinquefolius* - FR 11 August 1977, Vol. 42, No. 155.

² *Primula mistassinica* - FR 21 April 1975, Vol. 40, No. 77.

E = endangered

T = threatened

Ex = recently extinct or extinct in wild

PrEx = probably extinct

Tax? = taxonomic status in doubt

Cult = may be extinct in nature, but the plants are in cultivation or have been transplanted

1 = good candidates for listing

2 = potential candidates for listing, need further study

3A = delete, taxon extinct

3B = delete, taxonomic status clarified (synonym)

3C = delete, more abundant than warrants listing

* *Pedicularis furbishiae*—final rulemaking, “endangered” status, Federal Register, 26 April 1978, Vol. 43, no. 81.

* *Potentilla robbinsiana*—final rulemaking, “endangered” status, Federal Register, 17 September 1980, Vol. 45, no. 182.

- * *Isotria medeoloides*—proposed, “endangered” status, Federal Register, 11 September 1980, Vol. 45, no. 178.
- * *Paronychia argyrocoma* var. *albimontana*—proposed “threatened” status, Federal Register, 27 October 1980, Vol. 45, no. 209.
- * *Panax quinquefolius*—final rulemaking, trade regulated by international treaty; prohibits export from states such that it would be detrimental to the survival of the species, Federal Register, 15 August 1979, Vol. 44, No. 159.

NEW ENGLAND REGIONAL LIST OF RARE AND ENDANGERED VASCULAR PLANTS

Families are ordered according to Gray's Manual 8th. Ed. Species are ordered alphabetically within each family.

KEY TO THE SYMBOLS USED IN THIS LIST

Status:

- * Taxon is of national significance
- E/T Taxon is Threatened or Endangered in New England
- R Taxon is Rare in New England but not Threatened nor Endangered
- ? Taxonomic problem, the taxon needs taxonomic clarification

Occurrence within individual states:

- (blank) Does not occur within the state
- × Is on the state list of rare and endangered vascular plant species
- ×? Is on the state list but perhaps shouldn't be
- “×” Occurs in the state, is not on the state list but perhaps should be
- O Occurs in the state
- 1S One station has been reported for the state
- 1S? Unconfirmed report of one station for the state
- 1R One report exists for the state
- 1H One historical record exists for the state
- ? Questionable record(s) exists for the state

Status	Taxon	ME	NH	VT	MA	RI	CT
LYCOPODIACEAE							
E/T	<i>Lycopodium alopecuroides</i>				×	×	
E/T	<i>Lycopodium carolinianum</i>				×		
R	<i>Lycopodium sabinaefolium</i>	0	0	0			
R	<i>Lycopodium selago</i>	“×”	×	×	×		×
R	<i>Lycopodium sitchense</i>	0	0	0			
SELAGINELLACEAE							
* E/T	<i>Selaginella selaginoides</i>	×					
ISOETACEAE							
* E/T	<i>Isoetes eatoni</i>		×		×		×
R	<i>Isoetes engelmanni</i>		×	×	0	×	0
OPHIOGLOSSACEAE							
* E/T	<i>Botrychium lunaria</i>	×	×	×			
SCHIZAEACEAE							
* E/T	<i>Lygodium palmatum</i>		×	×	×	×	×

Rhodora

POLYPODIACEAE

E/T	<i>Adiantum pedatum</i> var. <i>aleuticum</i>	×		×			
E/T	<i>Asplenium montanum</i>					×	×
R	<i>Asplenium ruta-muraria</i>				“×”	×	×
* E/T	<i>Asplenium viride</i>	×			×		
E/T	<i>Cheilanthes lanosa</i> (= <i>C. vestita</i>)						×
R	<i>Cryptogramma stelleri</i>	×	×	0	×		×
* E/T	<i>Dryopteris filix-mas</i>	×		×			
R	<i>Dryopteris fragrans</i>	×	×	×			
E/T	<i>Pellaea glabella</i>			×			
* E/T	<i>Woodsia alpina</i>	×		×			
* E/T	<i>Woodsia glabella</i>	×	×	×			

PINACEAE

R	<i>Juniperus horizontalis</i>	0	×	×			
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ZOSTERACEAE

R	<i>Potamogeton diversifolius</i> var. <i>diversifolius</i>					“×”	“×”
R	<i>Potamogeton filiformis</i> var. <i>alpinus</i>	“×”	×	×			
E/T	<i>Potamogeton filiformis</i> var. <i>occidentalis</i>	“×”					
R	<i>Potamogeton friesii</i>	“×”		×	×		×

Status	Taxon	ME	NH	VT	MA	RI	CT
R	<i>Potamogeton hillii</i>			×	×		“×”
* E/T	<i>Potamogeton lateralis</i>		×	×	×		×
R	<i>Potamogeton strictifolius</i>	“×”		0	×		×
ALISMATACEAE							
* E/T	<i>Echinodorus tenellus</i>				×		
R	<i>Sagittaria montevidensis</i> ssp. <i>spongiosus</i> (= <i>Lophotocarpus spongiosus</i>)	“×”	×		×		×
* E/T	<i>Sagittaria teres</i>				×	“×”	
GRAMINEAE							
R	<i>Agrostis borealis</i> var. <i>borealis</i>	“×”	×	×			
?	<i>Ammophila champlainensis</i>			×			
R	<i>Aristida purpurascens</i>				×	0	0
E/T	<i>Aristida tuberculosa</i>		×		×		×
E/T	<i>Bouteloua curtipendula</i>						×
E/T	<i>Calamagrostis fernaldii</i>	“×”		×			
E/T	<i>Calamagrostis inexpansa</i> var. <i>brevior</i>			×			
* E/T	<i>Calamagrostis inexpansa</i> var. <i>novae-angliae</i>	×	×	×			
* E/T	<i>Calamagrostis lacustris</i>	×	×				
E/T	<i>Calamagrostis neglecta</i>	×	×	×			
E/T	<i>Calamagrostis pickeringii</i>	“×”	×		×		

E/T	<i>Danthonia spicata</i> var. <i>pinetorum</i>	"X"	"X"	"X"			
* E/T	<i>Deschampsia atropurpurea</i>	"X"	X	X			
E/T	<i>Deschampsia caespitosa</i> var. <i>caespitosa</i>	0	X	0			0
R	<i>Elymus arenarius</i> var. <i>villosus</i> (= <i>E. mollis</i>)	0	X		X		
E/T	<i>Festuca ovina</i> var. <i>saximontana</i> (= <i>F. saximontana</i>)			X			
* E/T	<i>Festuca prolifera</i>	"X"	X				
E/T	<i>Hierochloe alpina</i>	"X"	X	X			
E/T	<i>Muhlenbergia capillaris</i>				X		0
E/T	<i>Oryzopsis canadensis</i>	0	X				
E/T	<i>Panicum amarum</i>						X
E/T	<i>Panicum auburne</i>				X		
E/T	<i>Panicum boscii</i> var. <i>boscii</i>				X		0
E/T	<i>Panicum boscii</i> var. <i>molle</i>						"X"
R	<i>Panicum commonsianum</i>				X		X
E/T	<i>Panicum flexile</i>			X	0		X
E/T	<i>Panicum gattingeri</i>				X		X
R	<i>Panicum longifolium</i>		X		X	0	0
E/T	<i>Panicum lucidum</i>				0		X
E/T	<i>Panicum polyanthes</i>				X		X
E/T	<i>Panicum roanokense</i>					"X"	X
E/T	<i>Panicum scoparium</i>				X	0	
E/T	<i>Panicum stipitatum</i>					0	X

Status	Taxon	ME	NH	VT	MA	RI	CT
R	<i>Panicum verrucosum</i>				0	0	×
E/T	<i>Panicum wrightianum</i>				×		
E/T	<i>Phleum alpinum</i>	×	×	1S?			
* E/T	<i>Poa alpigena</i>	"×	×				
E/T	<i>Poa fernaldiana</i>	"×	×	×			
R	<i>Poa glauca</i>	0	×	0			
R	<i>Puccinellia paupercula</i> var. <i>alaskana</i>	0	×		×	"×	×
R	<i>Setaria geniculata</i>				×	"×	0
R	<i>Spartina caespitosa</i>	"×	×		0	"×	
R	<i>Spartina cynosuroides</i>				×		0
E/T	<i>Sporobolus clandestinus</i>						×
E/T	<i>Sporobolus heterolepsis</i>				×		×
R	<i>Tripsacum dactyloides</i>				×	"×	0
R	<i>Trisetum melicoides</i>	0	×	0			
* E/T	<i>Trisetum spicatum</i> var. <i>pilosiglume</i>	"×	×	×			
CYPERACEAE							
E/T	<i>Carex adusta</i>	0	×				
R	<i>Carex alopecoidea</i>	×		0	×		×
* E/T	<i>Carex atratiformis</i>	"×	×	×			
E/T	<i>Carex barrattii</i>						×
R	<i>Carex bigelowii</i>	"×	×	×			

E/T	<i>Carex bushii</i>	"X"		X	X		0
E/T	<i>Carex capillaris</i> var. <i>capillaris</i>	"X"	X				
E/T	<i>Carex capillaris</i> var. <i>major</i>	X					
* E/T	<i>Carex capitata</i>		X				
E/T	<i>Carex collinsii</i>			X		"X"	X
E/T	<i>Carex crawei</i>	X					X
E/T	<i>Carex davisii</i>			X	X		X
R	<i>Carex flaccosperma</i> var. <i>glaucodea</i>		X		X		0
* E/T	<i>Carex flava</i> var. <i>gaspensis</i>	"X"		X			
R	<i>Carex formosa</i>			0	X		X
E/T	<i>Carex garberi</i> var. <i>bifaria</i>	"X"	X				
R	<i>Carex gracilescens</i>		X	X	0		0
R	<i>Carex grayii</i>			0	X		0
R	<i>Carex hitchcockiana</i>			0	X		0
* E/T	<i>Carex katahdinensis</i>	X					
* E/T	<i>Carex lenticularis</i> var. <i>albimontana</i>		X				
E/T	<i>Carex livida</i> var. <i>grayana</i>	"X"		X	X		
R	<i>Carex lupuliformis</i>			0			X
E/T	<i>Carex media</i>	X					
E/T	<i>Carex molesta</i>				X		X
E/T	<i>Carex nigromarginata</i>						X
R	<i>Carex oligocarpa</i>			X	X		X
* E/T	<i>Carex oronensis</i>	X					
E/T	<i>Carex polymorpha</i>	0	X		X	"X"	X

Status	Taxon	ME	NH	VT	MA	RI	CT
E/T	<i>Carex praticola</i>	×					
E/T	<i>Carex rariflora</i>	×					
* E/T	<i>Carex richardsonii</i>			×			
E/T	<i>Carex salina</i> var. <i>kattegatensis</i>	0			×		
E/T	<i>Carex saxatilis</i> var. <i>militaris</i>	×					
E/T	<i>Carex saxatilis</i> var. <i>rhomalea</i>	×					
E/T	<i>Carex schweinitzii</i>			0	×		×
R	<i>Carex scirpoidea</i>	0	×	0			
E/T	<i>Carex sterilis</i> (including <i>C. elachycarpa</i>)	"×		×	×		×
E/T	<i>Carex striatula</i>				×		0
E/T	<i>Carex styloflexa</i>			×			0
E/T	<i>Carex tenuiflora</i>	0		×			
E/T	<i>Carex tetanica</i>				×		×
R	<i>Carex trichocarpa</i>			×	×		0
E/T	<i>Carex vaginata</i>	0		×			
E/T	<i>Carex walteriana</i> var. <i>brevis</i>				×		
R	<i>Carex weigandii</i>	0	×	×			
E/T	<i>Carex willdenowii</i>			×	×		×
E/T	<i>Carex woodii</i>		×		×		×
E/T	<i>Cyperus engelmanni</i>			×	×		
E/T	<i>Cyperus ferruginescens</i>			×	×		0

R	<i>Cyperus houghtonii</i>	×	×	×	0		
E/T	<i>Eleocharis ambigens</i>				×		
R	<i>Eleocharis diandra</i>	0	×	×			×
E/T	<i>Eleocharis equisetoides</i>				×	“×”	×
R	<i>Eleocharis melanocarpa</i>				×	0	
E/T	<i>Eleocharis microcarpa</i> var. <i>filiculmis</i>						×
E/T	<i>Eleocharis nitida</i>		×	×			
E/T	<i>Eleocharis ovata</i> var. <i>heuseri</i>	0	×				
R	<i>Eleocharis pauciflora</i> var. <i>fernaldii</i>	0	×	×			
E/T	<i>Eleocharis quadrangulata</i> var. <i>crassior</i>				×		×
E/T	<i>Eleocharis tricostata</i>				×	“×”	
R	<i>Fuirena pumila</i>				×	“×”	×
R	<i>Hemicarpha micrantha</i>	×	×		0	0	×
E/T	<i>Psilocarya nitens</i>				×		
E/T	<i>Psilocarya scirpoides</i>				×	“×”	
R	<i>Rhynchospora capillacea</i>	0	×	×			×
* E/T	<i>Rhynchospora inundata</i>				×	“×”	
E/T	<i>Rhynchospora torreyana</i>				×	“×”	
E/T	<i>Scirpus ancistrochaetus</i>			×	×		
* E/T	<i>Scirpus hallii</i>				×		
* E/T	<i>Scirpus longii</i>	×			×		×
R	<i>Scirpus pendulus</i> (= <i>S. lineatus</i>)	×	×	×	×		×
E/T	<i>Scleria pauciflora</i>						×

Status	Taxon	ME	NH	VT	MA	RI	CT
R	<i>Scleria reticularis</i>				×	“×”	×
R	<i>Scleria triglomerata</i>				×		0
E/T	<i>Scleria verticillata</i>						×
ARACEAE							
R	<i>Arisaema dracontium</i>		?	×	×		×
E/T	<i>Orontium aquaticum</i>				×	×	×
LEMNACEAE							
R	<i>Wolffiella floridana</i>				“×”		
ERIOCAULACEAE							
R	<i>Eriocaulon parkeri</i>	×			×		×
PONTEDERIACEAE							
E/T	<i>Heteranthera reniformis</i>						×
JUNCACEAE							
E/T	<i>Juncus alpinus</i> var. <i>alpinus</i>	“×”					
E/T	<i>Juncus alpinus</i> var. <i>fuscescens</i>			×			
R	<i>Juncus alpinus</i> var. <i>rariflorus</i>	×		×			
E/T	<i>Juncus biflorus</i>				×		

E/T	<i>Juncus debilis</i>					“X”	X
E/T	<i>Juncus oronensis</i>	X					
* E/T	<i>Juncus stygius</i> var. <i>americanus</i>	X					
* E/T	<i>Luzula confusa</i>	X	X				
E/T	<i>Luzula pallescens</i>		X	X			
E/T	<i>Luzula spicata</i>	X	X	X			

LILIACEAE

E/T	<i>Chamaelirium luteum</i>					X	O
E/T	<i>Melanthium hybridum</i>						X
E/T	<i>Smilax bona-nox</i>					X	
E/T	<i>Smilax tamnoides</i> var. <i>hispida</i>						X
E/T	<i>Streptopus</i> × <i>oreopolus</i> (<i>S. amplexifolius</i> var. <i>oreopolus</i>)	“X”	“X”				
E/T	<i>Zigadenus glaucus</i>					X	

HAEMODORACEAE

R	<i>Lachnanthes caroliana</i> (= <i>L. tinctoria</i>)					X	X	X
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IRIDACEAE

E/T	<i>Iris hookeri</i>	X					
E/T	<i>Sisyrinchium arenicola</i>					X	

Status	Taxon	ME	NH	VT	MA	RI	CT
ORCHIDACEAE							
E/T	<i>Aplectrum hyemale</i>			×	×		×
R	<i>Arethusa bulbosa</i>	×	×	×	×	0	×
* E/T	<i>Calypso bulbosa</i>	×	×	×			
R	<i>Corallorhiza odontorhiza</i>	×		×	0	0	×
* E/T	<i>Cypripedium arietinum</i>	×	×	×	×		×
R	<i>Cypripedium calceolus</i> var. <i>parviflorum</i>	0	×	×	0	×	0
R	<i>Cypripedium calceolus</i> var. <i>pubescens</i>	0	×	×	0	×	0
R	<i>Cypripedium reginae</i>	0	×	×	×		×
E/T	<i>Goodyera oblongifolia</i>	×					
* E	<i>Isotria medeoloides</i>	×	×	×	×	×	×
E/T	<i>Isotria verticillata</i>	×	×	×	×	×	0
* E/T	<i>Listera auriculata</i>	×	×	×			
* E/T	<i>Listera australis</i>			×			
R	<i>Malaxis brachypoda</i> (= <i>M. monophyllos</i> var. <i>brachypoda</i>)	×	×	“×”	×		×
* E/T	<i>Orchis rotundifolia</i>	×		×			
R	<i>Orchis spectabilis</i>	×	×	×	0	0	0
E/T	<i>Platanthera ciliaris</i> (= <i>Habenaria ciliaris</i>)		×		×	×	×
E/T	<i>Platanthera cristata</i> (= <i>Habernaria cristata</i>)				×		

R	<i>Platanthera flava</i> var. <i>herbiola</i> (= <i>Habenaria flava</i> var. <i>herbiola</i>)	×	×	×	×	×	0
* E/T	<i>Platanthera leucophaea</i> (= <i>Habenaria leucophaea</i>)	×					
E/T	<i>Spiranthes tuberosa</i> var. <i>grayii</i>				“×”	“×”	“×”
E/T	<i>Spiranthes vernalis</i>		×		×	0	0
E/T	<i>Tipularia discolor</i>				×		
R	<i>Triphora trianthophora</i>	×	×	×	×		×
SAURURACEAE							
E/T	<i>Saururus cernuus</i>					×	“×”
SALICACEAE							
E/T	<i>Populus heterophylla</i>						×
* E/T	<i>Salix</i> × <i>peasei</i>		×				
* E/T	<i>Salix arctophila</i>	×					
* E/T	<i>Salix argyrocarpa</i>	×	×				
E/T	<i>Salix cordata</i> var. <i>abrasa</i>	0	×				
E/T	<i>Salix cordata</i> var. <i>cordata</i>	“×”			“×”		
E/T	<i>Salix glaucophylloides</i>	×					
* E/T	<i>Salix herbacea</i>	“×”	×				
* E/T	<i>Salix interior</i> var. <i>exterior</i>	×					
E/T	<i>Salix planifolia</i>	“×”	×		“×”		

Status	Taxon	ME	NH	VT	MA	RI	CT
R	<i>Salix serissima</i>			"X"	X		X
R	<i>Salix uva-ursi</i>	X	X	X			
BETULACEAE							
R	<i>Betula caerulea-grandis</i>	X		X			
* E/T	<i>Betula glandulosa</i>	X	X	X			
* E/T	<i>Betula minor</i>	"X"	X				
R	<i>Betula pumila</i>	0			X		X
FAGACEAE							
R	<i>Quercus muehlenbergii</i>			X	X		0
ULMACEAE							
E/T	<i>Ulmus thomasi</i>			X			
URTICACEAE							
E/T	<i>Parietaria floridana</i>		X				
SANTALACEAE							
E/T	<i>Comandra richardsiana</i>			X			
R	<i>Geocaulon lividum</i>	X	X	X			

ARISTOLOCHIACEAE

R *Aristolochia serpentaria* ×

POLYGONACEAE

E/T *Oxyria digyna* ×R *Polygonum douglasii* × 0R *Polygonum glaucum* × "×" 1RE/T *Polygonum setaceum* var. *interjectum* × "×"* E/T *Polygonum viviparum* × × ×E/T *Rumex fenestratus* 0 × 0

CHENOPODIACEAE

E/T *Suaeda americana* 0 ×R *Suaeda richii* 0 ×

AMARANTHACEAE

E/T *Amaranthus pumilis* "×" "×"

PORTULACACEAE

E/T *Montia lamprosperma* ×

CARYOPHYLLACEAE

E/T *Minuartia caroliniana* ×
(=*Arenaria caroliniana*)

Status	Taxon	ME	NH	VT	MA	RI	CT
R	<i>Minuartia glabra</i> (= <i>Arenaria glabra</i>)	"X"	"X"			"X"	X
R	<i>Minuartia groenlandica</i> (= <i>Arenaria groenlandica</i>)	"X"	X	X			
* E/T	<i>Minuartia marcescens</i> (= <i>Arenaria marcescens</i>)			X			
* E/T	<i>Minuartia rubella</i> (= <i>Arenaria rubella</i>)	"X"		X			
E/T	<i>Moehringia macrophylla</i> (= <i>Arenaria macrophylla</i>)			X	X		X
* T	<i>Paronychia argyrocoma</i> var. <i>albimontana</i>	X	X		X		
R	<i>Sagina decumbens</i>			X	0		0
E/T	<i>Sagina nodosa</i> ssp. <i>borealis</i>	"X"					
E/T	<i>Silene acaulis</i> var. <i>exscapa</i>	"X"	X				
NYMPHAEACEAE							
* E/T	<i>Nymphaea tetragona</i>	X					
RANUNCULACEAE							
E/T	<i>Anemone multifida</i>	X		X			
* E/T	<i>Hydrastis canadensis</i>			X	"X"		X
E/T	<i>Ranunculus gmelini</i> var. <i>hookeri</i>	X					

* E/T	<i>Ranunculus lapponicus</i>	×					
E/T	<i>Ranunculus subrigidus</i>		×	0	×		×
E/T	<i>Thalictrum confine</i>	×		0			
* E/T	<i>Trollius laxus</i> ssp. <i>laxus</i>						×
MAGNOLIACEAE							
E/T	<i>Magnolia virginiana</i>				×		
PAPAVERACEAE							
R	<i>Corydalis aurea</i>		×	“×”			
E/T	<i>Corydalis flavula</i>						×
CRUCIFERAE							
E/T	<i>Armoracia aquatica</i>			×			
E/T	<i>Barbarea orthoceras</i>	“×”	×				
* E/T	<i>Braya humilis</i> var. <i>leiocarpa</i>			×			
* E/T	<i>Cardamine bellidifolia</i>	×	×				
E/T	<i>Cardamine douglassii</i>					×	×
E/T	<i>Cardamine longii</i>	×					
E/T	<i>Descurainia pinnata</i> var. <i>brachycarpa</i>		×	×		0	
E/T	<i>Descurainia richardsonii</i>	×					
R	<i>Draba arabisans</i>	×		0			
* E/T	<i>Draba glabella</i> var. <i>glabella</i>			×			
* E/T	<i>Draba glabella</i> var. <i>orthocarpa</i>			×			

Status	Taxon	ME	NH	VT	MA	RI	CT
* E/T	<i>Draba lanceolata</i>	×	×	×			
R	<i>Subularia aquatica</i> ssp. <i>americana</i>	×	0	×			
DROSERACEAE							
* E/T	<i>Drosera anglica</i>	“×”					
R	<i>Drosera filiformis</i>				×	×	×
* E/T	<i>Drosera linearis</i>	×					
PODOSTEMACEAE							
R	<i>Podostemum ceratophyllum</i>	×	“×”	×	×	×	×
CRASSULACEAE							
R	<i>Sedum rosea</i>	×		×			
R	<i>Tillaea aquatica</i>	“×”	×	×	0		×
SAXIFRAGACEAE							
R	<i>Ribes rotundifolium</i>				?		×
* E/T	<i>Saxifraga aizoides</i>			×			
* E/T	<i>Saxifraga aizoon</i> var. <i>neogaea</i>	×	×	×			
* E/T	<i>Saxifraga cernua</i>		×				
* E/T	<i>Saxifraga oppositifolia</i>			×			

Status	Taxon	ME	NH	VT	MA	RI	CT
LEGUMINOSAE							
R	<i>Astragalus alpinus</i> var. <i>brunetianus</i>	×	×	×			
E/T	<i>Astragalus eucosmus</i>	×					
* E/T	<i>Astragalus robbinsii</i> var. <i>jesupi</i> (= <i>A. jesupi</i>)		×	×			
E/T	<i>Astragalus robbinsii</i> var. <i>minor</i> (= <i>A. blakei</i>)	×		×			
E/T	<i>Astragalus robbinsii</i> var. <i>robbinsii</i>			×			
E/T	<i>Cercis canadensis</i>						×
E/T	<i>Desmodium glabellum</i>						×
E/T	<i>Desmodium humifusum</i>						×
R	<i>Desmodium sessilifolium</i>				×	0	×
* E/T	<i>Hedysarum alpinum</i> var. <i>americanum</i>	×		×			
E/T	<i>Lespedeza repens</i>						×
* E/T	<i>Oxytropis campestris</i> var. <i>johannensis</i>	×					
E/T	<i>Phaseolus polystachios</i> var. <i>aquilonius</i>						×
LINACEAE							
E/T	<i>Linum intercursum</i>				×	“X”	×
E/T	<i>Linum sulcatum</i>			×	×		0

POLYGALACEAE

R	<i>Polygala senega</i>		×		0	×		×
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EUPHORBIACEAE

E/T	<i>Crotonopsis elliptica</i>							×
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CALLITRICHACEAE

R	<i>Callitriche anceps</i>		0	×	×	0		
E/T	<i>Callitriche hermaphroditica</i>				×			
E/T	<i>Callitriche terrestris</i> (= <i>C. deflexa</i> var. <i>austini</i>)					×		0

LIMNANTHACEAE

E/T	<i>Floerkea proserpinacoides</i>				×	×		×
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ANACARDIACEAE

R	<i>Rhus aromatica</i>				×			0
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AQUIFOLIACEAE

E/T	<i>Ilex montana</i> var. <i>mollis</i>					×		
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ACERACEAE

R	<i>Acer nigrum</i>			×	0	0		“×”
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Status	Taxon	ME	NH	VT	MA	RI	CT
RHAMNACEAE							
E/T	<i>Ceanothus herbaceus</i> (= <i>C. ovatus</i>)			×	“×”		
GUTTIFERAE							
E/T	<i>Ascyrum hypericoides</i> var. <i>multicaule</i>				×		
R	<i>Hypericum adpressum</i>		×		×	×	×
CISTACEAE							
* E/T	<i>Helianthemum dumosum</i>				×	×	×
R	<i>Helianthemum propinquum</i>				0	“×”	×
VIOLACEAE							
* E/T	<i>Hybanthus concolor</i>						×
?	<i>Viola adunca</i> var. <i>minor</i>	×	0	0	×		
R	<i>Viola brittoniana</i>	×			0		×
E/T	<i>Viola hirsutula</i>						×
* E/T	<i>Viola labradorica</i>		×				
* E/T	<i>Viola novae-angliae</i>	“×”					
E/T	<i>Viola palustris</i>	“×”	×				
E/T	<i>Viola striata</i>		“×”				×

CACTACEAE

R *Opuntia compressa* × 0

ELAEAGNACEAE

E/T *Shepherdia canadensis* × ×

LYTHRACEAE

E/T *Cuphea petiolata* × 0

E/T *Lythrum lineare* × ×

R *Rotala ramosior* × 0 ×

MELASTOMATACEAE

E/T *Rhexia mariana* ×

ONAGRACEAE

E/T *Epilobium alpinum* × ×

E/T *Epilobium anagallidifolium* × ×

R *Epilobium ciliatum* 0 × “×”

E/T *Epilobium hornemanni* 0 ×

E/T *Ludwigia polycarpa* × ×

E/T *Ludwigia sphaerocarpa* var. *macrocarpa* × 0 ×

E/T *Ludwigia sphaerocarpa* var. *sphaerocarpa* 0 0

Status	Taxon	ME	NH	VT	MA	RI	CT
HALORAGACEAE							
R	<i>Myriophyllum pinnatum</i>				×	0	×
ARALIACEAE							
E/T	<i>Panax quinquefolius</i>	×	×	×	×	1H	×
UMBELLIFERAE							
E/T	<i>Angelica venenosa</i>				×		0
E/T	<i>Hydrocotyle verticillata</i>				×		
R	<i>Lilaeopsis chinensis</i>	×	×		0		0
R	<i>Osmorhiza chilensis</i>	0	×	×			
E/T	<i>Osmorhiza obtusa</i>			×			
E/T	<i>Taenidia integerrima</i>			×		"X"	×
E/T	<i>Zizia aptera</i>						×
PYROLACEAE							
E/T	<i>Pterospora andromedea</i>		×	×	1H		
R	<i>Pyrola asarifolia</i> var. <i>purpurea</i>	"X"	×	0	×		
ERICACEAE							
* E/T	<i>Arctostaphylos alpina</i>	×	×				

* E/T	<i>Cassiope hypnoides</i>	×	×				
* E/T	<i>Loiseleuria procumbens</i>	×	×				
E/T	<i>Lyonia mariana</i>						×
* E/T	<i>Phyllodoce caerulea</i>	×	×				
* E/T	<i>Rhododendron lapponicum</i>	×	×				
* E/T	<i>Vaccinium boreale</i>	“×”	×	“×”			
DIAPENSIACEAE							
* E/T	<i>Diapensia lapponica</i>	×	×	×			
PRIMULACEAE							
E/T	<i>Primula laurentiana</i>	×					
E/T	<i>Primula mistassinica</i>	×		×			
EBENACEAE							
E/T	<i>Diospyros virginiana</i>				×		×
GENTIANACEAE							
E/T	<i>Gentiana amarella</i>	×		×			
R	<i>Gentiana andrewsii</i>		×	0	0		0
E/T	<i>Gentiana rubricaulis</i>	×		×			
E/T	<i>Lomatogonium rotatum</i>	×					
E/T	<i>Sabatia campanulata</i>				×		
E/T	<i>Sabatia dodecandra</i>						×

Status	Taxon	ME	NH	VT	MA	RI	CT
* E/T	<i>Sabatia kennedyana</i>				×	×	
R	<i>Sabatia stellaris</i>				×	×	0
ASCLEPIADACEAE							
E/T	<i>Asclepias variegata</i>						×
E/T	<i>Asclepias viridiflora</i>						×
CONVOLVULACEAE							
E/T	<i>Cuscuta coryli</i>						×
POLEMONIACEAE							
E/T	<i>Polemonium van-bruntiae</i>			×			
HYDROPHYLIACEAE							
E/T	<i>Hydrophyllum canadense</i>			×	×		
BORAGINACEAE							
E/T	<i>Cynoglossum virginianum</i>						×
E/T	<i>Hackelia americana</i>	×	×	×			
R	<i>Mertensia maritima</i>	0			×		
R	<i>Onosmodium virginianum</i>				×	0	0

LABIATAE

E/T	<i>Agastache nepetoides</i>			×		×
R	<i>Agastache scrophulariaefolia</i> var. <i>mollis</i>			0	×	0
R	<i>Agastache scrophulariaefolia</i> var. <i>scrophulariaefolia</i>			0	×	0
R	<i>Blephilia ciliata</i>			0	×	0
E/T	<i>Blephilia hirsuta</i> var. <i>glabrata</i>			×		
E/T	<i>Blephilia hirsuta</i> var. <i>hirsuta</i>			0	×	×
E/T	<i>Collinsonia canadensis</i> var. <i>punctata</i>					×
R	<i>Isanthus brachiatus</i>			0	×	“×”
E/T	<i>Pycnanthemum clinopodioides</i>				×	×
E/T	<i>Pycnanthemum torrei</i>		×			×
E/T	<i>Scutellaria integrifolia</i>				×	“×”
E/T	<i>Scutellaria parvula</i> var. <i>leonardi</i>	“×”				“×”
E/T	<i>Scutellaria parvula</i> var. <i>parvula</i>	“×”		“×”		

SCROPHULARIACEAE

* E/T	<i>Agalinis acuta</i> (= <i>Gerardia acuta</i>)				×	×	×
* E/T	<i>Agalinis neoscotia</i> (= <i>Gerardia neoscotia</i>)	“×”					
E/T	<i>Aureolaria pedicularia</i> var. <i>intercedens</i>		×		“×”		
R	<i>Castilleja coccinea</i>		×		0	×	0

Status	Taxon	ME	NH	VT	MA	RI	CT
E/T	<i>Castilleja septentrionalis</i>	×	×	×			
E/T	<i>Collinsia parviflora</i>			×			
E/T	<i>Euphrasia disjuncta</i>	×					
* E/T	<i>Euphrasia oakesii</i>	×	×				
R	<i>Mimulus alatus</i>				×		0
?	<i>Mimulus ringens</i> var. <i>colpophilus</i>	×		×			
* E	<i>Pedicularis furbishiae</i>	×					
R	<i>Pedicularis lanceolata</i>				×		0
* E/T	<i>Schwalbea americana</i>				×		×
E/T	<i>Veronica alpina</i> var. <i>unalaschcensis</i>	×	×				
E/T	<i>Veronica comosa</i>			0	×		
LENTIBULARIACEAE							
E/T	<i>Pinguicula vulgaris</i>		×	×			
R	<i>Utricularia biflora</i>				×	0	×
E/T	<i>Utricularia fibrosa</i>				×		×
E/T	<i>Utricularia subulata</i>				“×”		
ACANTHACEAE							
E/T	<i>Justicia americana</i>			×			
PLANTAGINACEAE							
E/T	<i>Littorella americana</i>	“×”		×			

RUBIACEAE

R	<i>Galium labradoricum</i>	0	×	×	×	×
* E/T	<i>Houstonia caerulea</i> var. <i>faxonorum</i>		×			
E/T	<i>Houstonia lanceolata</i>	×			×	

CAPRIFOLIACEAE

E/T	<i>Lonicera hirsuta</i>			×	×	
E/T	<i>Triosteum angustifolium</i> var. <i>angustifolium</i>					“×”
E/T	<i>Triosteum angustifolium</i> var. <i>eamesii</i>					×
R	<i>Viburnum edule</i>	×	×	×		
E/T	<i>Viburnum nudum</i>					×
E/T	<i>Viburnum prunifolium</i>					×

VALERIANACEAE

* E/T	<i>Valeriana uliginosa</i>	×	“×”	×		
E/T	<i>Valerianella radiata</i> var. <i>fernaldiana</i>					×

CAMPANULACEAE

E/T	<i>Lobelia siphilitica</i>	×			0	0
E/T	<i>Lobelia spicata</i> var. <i>campanulata</i>	“×”	×			

COMPOSITAE

* E/T	<i>Achillea borealis</i>	×	×			
?	<i>Antennaria petaloidea</i>					×

Status	Taxon	ME	NH	VT	MA	RI	CT
?	<i>Antennaria rupicola</i>	×					
E/T	<i>Antennaria virginica</i>			×			
E/T	<i>Arnica mollis</i>	×	×	×			
E/T	<i>Artemisia canadensis</i>	×		“×”			
E/T	<i>Aster concolor</i>				×	0	
E/T	<i>Aster foliaceus</i> var. <i>arcuans</i>		×				
R	<i>Aster foliaceus</i> var. <i>foliaceus</i>	×	0	×			
R	<i>Aster glomeratus</i>		0	×	“×”		×
R	<i>Aster infirmus</i>				×		0
R	<i>Aster johannensis</i> var. <i>villicaulis</i>	“×”	“×”	×	“×”		
R	<i>Aster junciformis</i>	0		×			
E/T	<i>Aster patens</i> var. <i>phlogifolius</i>				“×”	“×”	“×”
E/T	<i>Aster prenanthoides</i>				×		×
R	<i>Aster ptarmicoides</i>		×	0	×		×
E/T	<i>Aster sagittifolius</i>			×			
R	<i>Bidens eatonii</i>	0			×		×
E/T	<i>Bidens heterodoxa</i>						×
R	<i>Bidens hyperborea</i>	0			×		
E/T	<i>Cacalia suaveolens</i>						×
E/T	<i>Chrysopsis mariana</i>					×	
R	<i>Erigeron hyssopifolius</i>	×		×			
* E/T	<i>Eupatorium leucolepis</i> var. <i>novae-angliae</i>				×	×	
E/T	<i>Eupatorium rotundifolium</i>				×		“×”

R	<i>Gnaphalium purpureum</i>	"X"			X	0	0
* E/T	<i>Gnaphalium supinum</i>	X	X				
E/T	<i>Gnaphalium sylvaticum</i>	0	0	X			
E/T	<i>Hieracium robinsonii</i>	0	X				
E/T	<i>Hieracium umbellatum</i>		X				
E/T	<i>Polymnia canadensis</i>			X			X
* E/T	<i>Prenanthes boottii</i>	X	X	X			
E/T	<i>Prenanthes racemosa</i>	X		X?			
R	<i>Prenanthes trifoliolata</i> var. <i>nana</i>	0	X				
R	<i>Rudbeckia triloba</i>			X	0		0
E/T	<i>Sclerolepis uniflora</i>		X		X	X	
* E/T	<i>Solidago calcicola</i>	"X"	X	X?			
R	<i>Solidago cutleri</i>	X	X	X			
E/T	<i>Solidago erecta</i>				X		0
E/T	<i>Solidago macrophylla</i> var. <i>thyrsoidea</i>	X	0	"X"			
R	<i>Solidago rigida</i>				X	0	0
* E/T	<i>Tanacetum huronense</i> var. <i>johannense</i>	X					

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